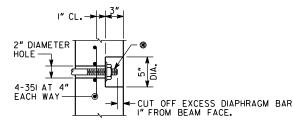


## ELEVATION

## NOTES

- I. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 9'-O" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.
- 2. CHAMFER EDGES OF BEAMS 1/2", 3/4" OR I".
- 3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE  $\frac{1}{8}$ " EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.
- 4. AT Q BEARING, FORM A 1 $\frac{1}{4}$ " DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 6" X 1 $\frac{1}{4}$ " X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1 $\frac{1}{2}$ " DIAMETER SMOOTH DOWEL. SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS.
- 5. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET. ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY 1/4". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.
- 6. ALL HOLES FORMED INTO THE BEAMS TO FACILITATE TRANSPORT SHALL BE FILLED AND GIVEN A TYPE I FINISH, PRIOR TO ACCEPTANCE OF THE BEAM. REMOVE PVC OR SIMILAR FORMING MATERIALS FROM EACH HOLE, EXPOSING THE CONCRETE SURFACE. COAT INTERIOR OF HOLE WITH A TYPE II EPOXY RESIN ADHESIVE IN ACCORDANCE WITH GEORGIA STANDARD SPECIFICATION 886 AND FILL WITH A RAPID SETTING PATCHING MATERIAL IN ACCORDANCE WITH GEORGIA STANDARD SPECIFICATION 934.
- 7. NON-COMPOSITE DEAD LOAD DEFLECTION (ANC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING.
- 8. COMPOSITE DEAD LOAD DEFLECTION (AC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.
- 9. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.
- IO. PRESTRESSING DATA IS AS FOLLOWS:
  - A. USE XX 0.6" DIAMETER LOW-RELAXATION (A = 0.217 SQ IN) STRANDS. PRETENSION TOP FOUR (4) STRANDS TO IO,000 LBS EACH. PRETENSION BOTTOM STRANDS TO 43,943 LBS
  - B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (fci) OF X.XXX PSI.
  - C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS X,XXX,XXX LBS.
  - D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS XXX,XXX LBS.
- II. CONCRETE STRENGTH (fc) = X,XXX PSI.
- 12. ALLOWABLE PSC BEAM TENSION = XXX PSI.



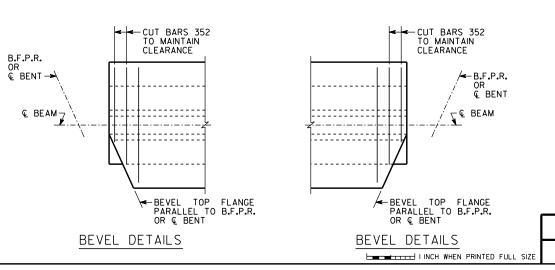
◆ DIAPHRAGM BAR SHALL BE A I" DIAMETER PLAIN BAR, THREADED 5" ON EACH END, WITH  $\frac{1}{4}$ " X  $\frac{3}{2}$ " DIAMETER WASHERS AND HEX NUTS (ASTM A 709 GRADE 36).

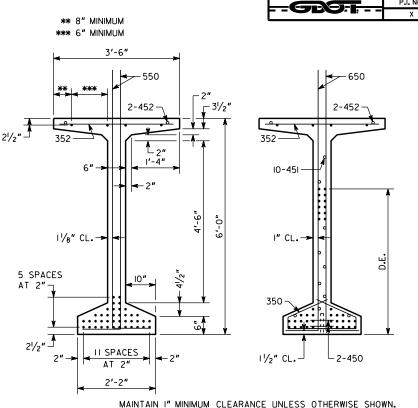
TIGHTEN DIAPHRAGM BAR AS PER SUB-SECTION 507.3.05.C OF THE GEORGIA DOT SPECIFICATIONS.

AFTER EXCESS DIAPHRAGM BAR HAS BEEN CUT OFF. PAINT DIAPHRAGM BAR, WASHER, AND NUT EXPOSED IN RECESS WITH SPECIAL PROTECTIVE COATING NO. 2 P AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. AFTER PAINTING, FILL THE RECESS WITH AN APPROVED EPOXY GROUT.

GALVANIZING OF THE DIAPHRAGM BAR AS PER SUB-SECTION 865.2.01.B.12 OF THE GEORGIA DOT SPECIFICATIONS IS NOT

## RECESS DETAIL FOR DIAPHRAGM BAR ENDS





MAINTAIN I" MINIMUM CLEARANCE UNLESS OTHERWISE SHOWN.
• INDICATES 0.6" DIAMETER PRESTRESSED STRANDS.

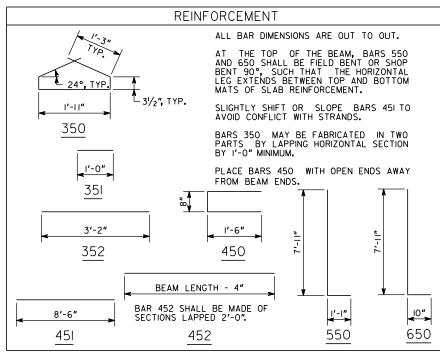
SECTION AT MIDPOINT

DRAWING NO.

35-XXXX

X OF X

SECTION AT END



GEORGIA DEPARTMENT OF TRANSPORTATION ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES BULB TEE, 72 IN PSC BEAM - END BEAMS NO SCALE REVIEWED DLC/SKG BRIDGE SHEET CHECKED X DESIGN GROUP PPROVED DPD

BRIDGE NO. I

MIDPOINT, DETAILS SYMMETRICAL ABOUT MIDPOINT UNLESS NOTED ->

\* AT CONTRACTOR'S OPTION, WHERE A RECESS IS NOT REQUIRED, A 3" DIAMETER HOLE MAY BE USED.

SPAN LENGTH = A

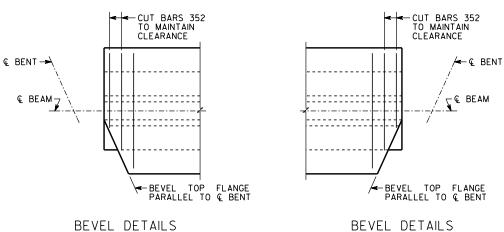
BEAM LENGTH = B

1'-0"-

X SPACES AT Y

2-550 AND 352 AT EACH LOCATION

## RECESS DETAIL FOR DIAPHRAGM BAR ENDS



\*\* 8" MINIMUM \*\*\* 6" MINIMUM 550 650 2-452-- 31/2" 2-452-10-451-I" CL. 11/8" CL. 5 SPACES AT 2" 350 II SPACES L 2-450 AT 2" 2'-2"

MAINTAIN I" MINIMUM CLEARANCE UNLESS OTHERWISE SHOWN.
• INDICATES 0.6" DIAMETER PRESTRESSED STRANDS.

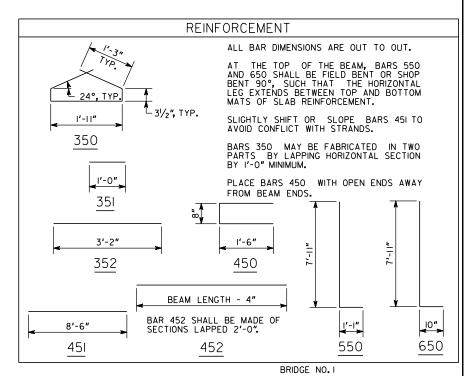
SECTION AT MIDPOINT

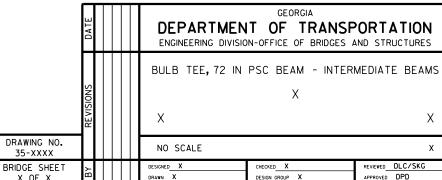
→ Ç BENT

-2-650 AND 352 AT EACH LOCATION

<sup>⊔</sup>2-450

SECTION AT END





A. USE XX - 0.6" DIAMETER LOW-RELAXATION (A = 0.217 SQ IN) STRANDS. PRETENSION TOP FOUR (4) STRANDS TO 10,000 LBS EACH. PRETENSION BOTTOM STRANDS TO 43,943 LBS B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (fci) OF X.XXX PSI. C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS X,XXX,XXX LBS. D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL

7. NON-COMPOSITE DEAD LOAD DEFLECTION (ANC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE

8. COMPOSITE DEAD LOAD DEFLECTION (AC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.

9. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.

LOSSES IS XXX,XXX LBS. II. CONCRETE STRENGTH (fc) = X,XXX PSI. 12. ALLOWABLE PSC BEAM TENSION = XXX PSI.

SLAB AND COPING.

IO. PRESTRESSING DATA IS AS FOLLOWS:

€ BENT →

I INCH WHEN PRINTED FULL SIZE

CUT OFF EXCESS DIAPHRAGM BAR I" FROM BEAM FACE.

X SPACES

<sup>\_</sup>2-452

AT Y

2 SPACES 4" 4 SPACES

20-350 AT 6"

& BEARING -

AT 4"

AT 6"

● DIAPHRAGM BAR SHALL BE A I" DIAMETER PLAIN BAR, THREADED 5" ON EACH END, WITH  $\frac{1}{4}$ " X  $\frac{3}{2}$ " DIAMETER WASHERS AND HEX

TIGHTEN DIAPHRAGM BAR AS PER SUB-SECTION 507.3.05.C OF

AFTER EXCESS DIAPHRAGM BAR HAS BEEN CUT OFF. PAINT DIAPHRAGM BAR, WASHER, AND NUT EXPOSED IN RECESS WITH SPECIAL PROTECTIVE COATING NO. 2 P AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. AFTER PAINTING, FILL THE RECESS WITH AN APPROVED EPOXY GROUT.

GALVANIZING OF THE DIAPHRAGM BAR AS PER SUB-SECTION 865.2.01.B.12 OF THE GEORGIA DOT SPECIFICATIONS IS NOT